Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of	)	
	)	
National Radio Systems Committee's "In-Band/On Channel Digital Radio Broadcasting Standard NRSC-5"	)	MM Docket No. 99-325

COMMENTS OF HARRIS CORPORATION

Harris Corporation ("Harris") respectfully submits these comments in response to the Federal Communications Commission's ("Commission's") Public Notice in the above-captioned proceeding concerning the National Radio Systems Committee's ("NRSC") initial digital audio broadcasting ("DAB") standard entitled "In-Band/On-Channel" Digital Radio Broadcasting Standard NRSC-5.[1]

I. Introduction and Summary

Harris is an international communications equipment company with four operating divisions that offer products and services in the microwave, broadcast, secure tactical radio, and government communications systems markets. As the world's leading broadcast transmission equipment supplier, Harris' Broadcast Communication Division is the leader in digital solutions for television broadcasting and has been at the forefront of the transition to

[1] *Comment Sought on National Radio Systems Committee's "In-Band/On-Channel Digital Radio Broadcasting Standard NRSC-5,"* Public Notice, DA 05-1661, June 16, 2005.

digital television, supplying the majority of the digital television transmitters and encoders in the United States.

In addition, Harris is the leading manufacturer of a complete line of AM and FM digital-ready transmitters at all power levels. As a leader in digital radio, Harris is the first company in the world to offer its own high-definition ("HD") exciter and the first to incorporate correction and linearzation in the transmitter for FM HD radio, resulting in a more efficient transmission system and greater spectral purity. During fiscal 2003, Harris introduced several new products for the HD radio market, including a CODEC pre-conditioner that offers a quantum leap in audio digital signal processing within existing bit constraints and a digital low-power AM transmitter line. In addition, Harris is a member of National Public Radio's ("NPR's") Tomorrow Radio team and a co-developer of the multicasting technology that permits multi-channel audio capability.

Over 350 of the nation's 16,000 radio stations already have purchased HD radio transmitters from Harris. The broadcast groups selecting Harris for their digital radio transition include Radio One, Cox Radio, Clear Channel, Hispanic Broadcasting Corporation, Beasley Broadcast Group, the West Virginia Radio Corporation, Infinity, Susquehanna, Journal Broadcast, and the American Christian Network. In addition, a majority of public radio stations that have converted to digital have selected Harris to be their equipment supplier.

Harris invested in iBiquity Digital Corporation ("iBiquity") to support the development of digital HD radio technology and has been a driving force in the development and testing of the In-Band On-Channel ("IBOC") standard. iBiquity's IBOC technology allows broadcasters to offer an expanding range of new digital information and entertainment services. Harris worked with NPR and the NRSC to guide iBiquity in the implementation of an improved audio CODEC to assure audio quality and to ensure the capability to add multiple audio channels. Consumers will not only enjoy improved audio quality and integrated audio related information, but will also benefit from increased control over their listening experience, new supplementary audio services and valuable information services.

To ensure the deployment of HD radio proceeds efficiently, Harris urges the Commission to adopt NRSC-5 standard on an expedited basis. Harris believes that a critical factor to ensuring the successful rollout of HD radio is the creation of a flexible regulatory environment that will strive to encourage radio broadcasters to make the investment necessary to convert to digital.

II. The Commission Should adopt the NRSC-5 standard on an Expedited Basis.

The In-Band/On-Channel ("IBOC") digital radio broadcasting system specified in the NRSC-5 standard is designed to permit a smooth evolution from current analog radio broadcasting to fully digital radio broadcasting. This system delivers digital audio and data services to mobile, portable, and fixed receivers

from terrestrial transmitters on existing Amplitude Modulation (AM) and Frequency Modulation (FM) radio-broadcast channels.

Broadcasters will be able to continue to transmit AM and FM analog signals simultaneously with the IBOC digital signals, allowing themselves and their listeners to convert from analog to digital radio while maintaining their current frequency allocations. This will result in a seamless transition with almost no disruption to consumers' listening experience. In addition, the system accepts as input compressed digital audio and utilizes base-band signal processing techniques such as interleaving and forward error correction to increase the robustness of the signal in the transmission channel. In adopting the NSRC-5 standard, the Commission will be enabling radio broadcasters to broadcast high quality audio signals plus ancillary data (to be transmitted using power levels and band segments selected to minimize interference to existing analog signals).

The NSRC-5 standard will ensure the successful rollout of HD radio and provide new and innovative service options, such as multicasting, for consumers. Harris strongly encourages the Commission to adopt the NSRC-5 standard on an expeditious basis to encourage the continuing rollout of HD radio.

III. Regulatory Flexibility Is Critical to Ensuring the Roll-Out of HD Radio

The Commission should adopt flexible DAB service rules that will increase the ability of broadcasters to compete in an increasingly competitive marketplace, and allow them to serve the public with new and innovative services. Imposing unnecessary regulatory or technical burdens on radio

broadcasters will dissuade radio broadcasters from making the necessary investment to convert to digital.

As the Commission is aware, radio plays an important role in serving the diverse needs of each community. A flexible regulatory environment enables radio broadcasters to customize their program and service offerings to best serve the needs of the market. A burdensome, regulatory regime that forces radio broadcasters to incur unnecessary costs should be avoided.

The Commission should allow technology and the marketplace to drive the digital radio conversion and provide a flexible regulatory environment that will not only promote innovative services, but also ensure that the Commission's diversity and localism goals are met. Services such as radio reading services for the blind, foreign language programming and other specialized programming will become more prevalent as radio broadcasters deploy digital radio in their respective communities and adopt digital audio multicasting as methods for generating additional revenue streams.

IV. Conclusion.

Harris urges the Commission to adopt the NSRC-5 standard as expeditiously as possible. Moreover, as the Commission moves forward with adopting final rules, Harris urges the Commission to provide a flexible regulatory environment for radio broadcasters. By doing so, the Commission will foster an environment that will facilitate greater HD radio access for all people and serve the Commission's public interest objectives.

Respectfully submitted,

HARRIS CORPORATION

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